

**In the Claims:**

The claims are as follows:

1. (Currently amended) A method comprising:

~~determining if a subject is trainable with respect to the performance of a given activity;~~

determining for a given activity a point of efficiency of ~~said a trainable~~ subject with respect to at least one parameter; and

training said trainable subject at or near said point of efficiency with respect to a state of accommodation until a state of inefficiency with respect to said at least one parameter or exhaustion occurs.

2. (Previously Cancelled).

3. (Previously Cancelled).

4. (Currently Amended) The method of claim 1, wherein the at least one parameter is one of a physical parameter, emotional parameter, and mental parameter of the trainable subject.

5. (Original) The method of claim 4, wherein the at least one physical parameter is selected from the group consisting of running turnover rate, stride length, stride strike force, muscle contraction speed, muscle contraction profile, muscle contraction strength, weight lifted, electromagnetic activity profile, chemical activity profile, body temperature, and blood pressure.

6. (Original) The method of claim 4, wherein the at least one physical parameter is selected from the group consisting of heart rate, heart beat strength, respiration rate,  $VO_2$ , perspiration rate, metabolic rate, blood flow, breathing rate, heat given off, and breath length.

7. (Original) The method of claim 4, wherein the at least one parameter is observed by a signal selected from the group of verbal utterance, physical motion.

8. (Currently Amended) The method of claim 1, wherein the trainable subject is selected from the group consisting of an animal, a human, a group of humans, a group of animals, a cellular automata, a group of cellular automata, microbes, plants, and a computer program and data.

9. (Previously Withdrawn) A method comprising:

taking a measurement relating to at least one continuous variable with respect to which a subject may remain in a state of accommodation; and

training the subject so the value of the measurement of the at least one continuous variable changes.

10. (Previously Withdrawn) The method of claim 9, wherein the at least one continuous variable is a quantity of time.

11. (Previously Withdrawn) The method of claim 9, wherein a state of accommodation includes at least one substantially consistent parameter.

12. (Previously Withdrawn) The method of claim 11, wherein the at least one substantially consistent parameter is a physical parameter of the subject.

13. (Previously Withdrawn) The method of claim 12, wherein the physical parameter is selected from the group consisting of running turnover rate, stride length, stride strike force, muscle contraction speed, muscle contraction profile, muscle contraction strength, electromagnetic activity profile, chemical activity profile, body temperature, and blood pressure.

14. (Previously Withdrawn) The method of claim 12, wherein the physical parameter is selected from the group consisting of heart rate, heart beat strength, respiration rate,  $\text{VO}_2$ , perspiration rate, metabolic rate, blood flow, heat given off, breathing rate, and breath length

15. (Previously Withdrawn) The method of claim 10, wherein the quantity of time shortens or function thereof is less.

16. (Previously Withdrawn) The method of claim 10, wherein the quantity of time lengthens or function thereof is more.

17. (Previously Presented) A method comprising:

- providing a performance system;
- activating the performance system;
- recording at least one parameter of the performance system;
- measuring at least one parameter of a subject;
- determining an at least one point of efficiency parameter with respect to a state of accommodation by changing the at least one parameter of the performance system until the at least one parameter of the subject substantially changes beyond a given tolerance function; and
- training the subject at or near the point of efficiency so the duration the subject can maintain the point of efficiency changes.

18. (Previously Presented) The method of claim 17, wherein the at least one parameter of the subject is a physical parameter.

19. (Original) The method of claim 18, wherein the physical parameter is selected from the group consisting of running turnover rate, stride length, stride strike force, muscle contraction speed, muscle contraction profile, muscle contraction strength, electromagnetic activity profile, chemical activity profile, body temperature, and blood pressure.

20. (Original) The method of claim 18, wherein the physical parameter is selected from the group consisting of heart rate, heart beat strength, respiration rate,  $\text{VO}_2$ , perspiration rate, metabolic rate, blood flow, breathing rate, and breath length.

21. (Previously Withdrawn) An apparatus comprising:
- a performance system;
  - at least one sensor for measuring at least one parameter of a subject being trained or measured by the performance system; and
  - a control system for controlling at least one parameter of the performance system and for acquiring the measured at least one parameter of the subject from the at least one sensor.
22. (Previously Withdrawn) The apparatus of claim 21, wherein the control system determines when the subject reaches a point of efficiency.
23. (Previously Withdrawn) The apparatus of claim 21, further comprising a timer for recording an elapsed time.
24. (Previously Withdrawn) The apparatus of claim 21, further comprising a memory device for storing information and data other than the parameter.
25. (Previously Withdrawn) The apparatus of claim 24, further comprising a display device for displaying the information and data other than the parameter from the memory device.
26. (Previously Withdrawn) The apparatus of claim 24, further comprising an output port for transmitting information and data other than the parameter from the memory device out to a printer or a remote computer.

27. (Previously Withdrawn) The apparatus of claim 21, further comprising an input device for allowing an operator to enter commands into the control system.

28. (Previously Withdrawn) The apparatus of claim 27, wherein the input device is selected from a group consisting of a keyboard, a mouse, a microphone, an optical motion sensor, and a keypad.

29. (Previously Withdrawn) The apparatus of claim 21, wherein the at least one parameter of the subject is a physical parameter.

30. (Previously Withdrawn) The apparatus of claim 29, wherein the physical parameter is selected from the group consisting of running turnover rate, stride length, stride strike force, muscle contraction speed, muscle contraction profile, muscle contraction strength, electromagnetic activity profile, chemical activity profile, body temperature, and blood pressure.

31. (Previously Withdrawn) The apparatus of claim 29, wherein the physical parameter is selected from the group consisting of heart rate, heart beat strength, respiration rate,  $VO_2$ , perspiration rate, metabolic rate, blood flow, breathing rate, and breath length.

32. (Previously Withdrawn) The apparatus of claim 21, wherein the performance system further includes a device selected from the group of a computer, a VCR, an auditory device, a visual device, a connection to a transmission system, or combinations thereof.

33. (Previously Withdrawn) The apparatus of claim 32 wherein the transmission system is selected from the group of internet, intranet, telephone system, acoustic, short wave, satellite, cable TV system, and combinations thereof.